

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
NOTICE OF FINAL PERMIT

In the Matter of an
Application for Permit by:

Mr. Walter P. Bussells
Jacksonville Electric Authority
21 West Church Street
Jacksonville, Florida 32202

DEP File No. 0310047-004-AC

Duval County

Enclosed is Final Permit Number 0310047-004-AC. This permit authorizes the installation of inlet foggers on the three simple cycle combustion turbines located at Kennedy Generating Station and designated as Emissions Units 003-005. This permit is issued pursuant to Chapter 403, Florida Statutes.

Any party to this order has the right to seek judicial review of it under section 120.68 of the Florida Statutes, by filing a notice of appeal under rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department of Environmental Protection in the Office of General Counsel, Mail Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000, and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The notice must be filed within thirty days after this order is filed with the clerk of the Department.

Executed in Tallahassee, Florida.



C. H. Fancy, P.E., Chief
Bureau of Air Regulation

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Notice of Final Permit (including the Final permit) was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on 4-20-00 to the person(s) listed:

Walter P. Bussells, JEA*
Bert Gianazza, JEA
Chris Kirts, DEP-NED
Jim Manning, RESD
Ken Kosky, P.E., Golder Associates

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to §120.52, Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

Kimi Jober
(Clerk)

4-20-00
(Date)

FINAL DETERMINATION

JEA Kennedy Generating Station Units 003-005 Simple Cycle Combustion Turbines Inlet Fogger Permit No. 0310047-004-AC

An Intent to Issue an Air Construction Permit for JEA Kennedy Generating Station, located at 4215 Tallyrand Avenue, Jacksonville, Duval County, Florida, was distributed on March 29, 2000. The Public Notice of Intent to Issue Air Construction Permit was published in the Florida Times-Union on April 1, 2000. Copies of the draft construction permit were available for public inspection at the Department offices in Jacksonville and Tallahassee.

The National Park Service, the U.S. Environmental Protection Agency or the public submitted no comments.

The final action of the Department is to issue the construction permit as proposed.



Department of Environmental Protection

Jeb Bush
Governor

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

David B. Struhs
Secretary

PERMITTEE:

Jacksonville Electric Authority
21 West Church Street
Jacksonville, Florida 32202

Authorized Representative:

Mr. Walter P. Bussells

DEP File No.	0310047-004-AC
Project	Emissions Units 003 -005 Inlet Foggers
SIC No.	4911
Expires:	December 31, 2000

PROJECT AND LOCATION:

Permit for the installation of inlet foggers on the three 56 (gross capacity) megawatt simple cycle Westinghouse (Model W501) combustion turbine-electrical generators Emissions Units 003 thru 005.

The units are located at the JEA Kennedy Generating Station, 4215 Tallyrand Avenue, Jacksonville, Duval County. UTM coordinates are: Zone 17; 440.1 km E and 3359.15 km N.

STATEMENT OF BASIS:

This construction permit is issued under the provisions of Chapter 403 of the Florida Statutes (F.S.), and Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297 of the Florida Administrative Code (F.A.C.). The above named permittee is authorized to modify the facility in accordance with the conditions of this permit and as described in the application, approved drawings, plans, and other documents on file with the Department of Environmental Protection (Department).

ATTACHED APPENDIX MADE A PART OF THIS PERMIT:

Appendix GC

Construction Permit General Conditions

Howard L. Rhodes, Director
Division of Air Resources
Management

FACILITY DESCRIPTION

This facility consists of three boilers, Nos. 8, 9 and 10; three combustion turbines, Nos. 3, 4, and 5; and, an auxiliary boiler, No. 1. The auxiliary boiler is allowed to operate when one of the boilers (No. 8, No. 9, or No. 10) is under standby status. There are no air pollution controls associated with the boilers. Boilers Nos. 8, 9 and 10 fire natural gas and/or No. 6 fuel oil; the combustion turbines fire only virgin No. 2 fuel oil; and, the auxiliary boiler fires No. 2 fuel oil and/or natural gas. There is a fuel oil storage tank farm associated with the boilers and turbines. This permitting action is for the installation of inlet foggers at the three (3) virgin No. 2 fuel oil-fired simple cycle combustion turbines that commenced commercial operation in 1973.

This Project is exempt from the requirements of Rule 62-212.400, F.A.C., Prevention of Significant Deterioration (PSD) as discussed in the Technical Evaluation and Preliminary Determination dated March 29, 2000.

REGULATORY CLASSIFICATION

This facility, JEA Kennedy Generating Station, is classified as a Major or Title V Source of air pollution because emissions of at least one regulated air pollutant, such as particulate matter (PM/PM₁₀), sulfur dioxide (SO₂), nitrogen oxides (NO_x), carbon monoxide (CO), or volatile organic compounds (VOC) exceeds 100 tons per year (TPY).

This facility is within an industry included in the list of the 28 Major Facility Categories per Table 62-212.400-1, F.A.C. Because emissions are greater than 100 TPY for at least one criteria pollutant, the facility is also a Major Facility with respect to Rule 62-212.400, Prevention of Significant Deterioration (PSD).

This facility is a major source of hazardous air pollutants (HAPs) and is also subject to the provisions of Title IV, Acid Rain, Clean Air Act as amended in 1990.

PERMIT SCHEDULE

- 04/01/00 Notice of Intent published in the Florida Times Union
- 03/29/00 Distributed Intent to Issue Permit
- 02/24/00 Application deemed complete
- 01/03/00 Received Application

RELEVANT DOCUMENTS:

The documents listed below are the basis of the permit. They are specifically related to this permitting action, but not all are incorporated into this permit. These documents are on file with the Department.

- Application received on January 3, 2000
- Department's incompleteness letter dated January 31, 2000
- JEA's response to Department's incompleteness letter received on February 24, 2000
- Department's Intent to Issue and Public Notice Package dated March 29, 2000

JEA-Kennedy Generating Station
Inlet Foggers Installation

Simple Cycle Combustion Turbines
Emissions Units 003 through 005

PERMIT SPECIFIC CONDITIONS

This permit addresses the following emissions units.

<u>E.U. ID No.</u>	<u>Brief Description</u>
-003	Combustion Turbine No. 3
-004	Combustion Turbine No. 4
-005	Combustion Turbine No. 5

1. This permit, 0310047-004-AC, is limited to the installation of three inlet foggers on Emission Units 003-005 as described in Permit 0310047-001-AV.
2. The provisions of Permit 0310047-001-AV remain in effect. However, an application shall be submitted to revise that permit to reflect the installation of three inlet foggers on Emission Units 003-005.
3. Inlet foggers may be installed at the compressor inlet to each of the three Westinghouse Model W 501 combustion turbine-electric generators. The four foggers may operate up to 3,000 hours per year in aggregate (average 1000 hours per unit per year). Maximum heat input shall not exceed 634 mmBtu/hr/unit and NOx emissions shall not exceed 300 lb/hr /unit at 90° F and 63 percent RH. This maximum heat input rate will vary depending upon ambient conditions and the combustion turbine characteristics. Manufacturer's curves corrected for site conditions or equations for correction to other ambient conditions shall be provided to the Department of Environmental Protection (DEP) within 45 days of completing the initial compliance testing after the foggers are installed. Thereafter, compliance shall be demonstrated as required in Rule 62-297.310(7). Nitrogen oxides emissions shall be demonstrated by a stack test on one representative turbine. Testing shall be performed each federal fiscal year, no later than September 30th. [Rule 62-296.570(4)(a)3, and (4)(b)5., F.A.C.]
4. The permittee shall record on a monthly basis in a written log the number of hours of operation for each evaporative cooling system and the total combined hours of operation for the previous 12 months for all three evaporative cooling systems. [Rule 62-4.160(15), F.A.C.]
5. The test method for visible emissions shall be EPA Method 9 and the test method for nitrogen oxides shall be EPA Method 7, incorporated and adopted by reference in Rule 62-204.800, F.A.C., and referenced in Chapter 62-297, F.A.C.[Rules 62-204.800, 62-296.320(4)(b)4.a. and 62-297.401, F.A.C.; and, Part XI, Rule 2.1101, JEPB]

APPENDIX GC
GENERAL PERMIT CONDITIONS [F.A.C. 62-4.160]

- G.1 The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
- G.2 This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings or exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
- G.3 As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey and vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.
- G.4 This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.
- G.5 This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.
- G.6 The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.
- G.7 The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:
- a) Have access to and copy and records that must be kept under the conditions of the permit;
 - b) Inspect the facility, equipment, practices, or operations regulated or required under this permit, and,
 - c) Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.
- Reasonable time may depend on the nature of the concern being investigated.
- G.8 If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:
- a) A description of and cause of non-compliance; and
 - b) The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance.

APPENDIX GC
GENERAL PERMIT CONDITIONS [F.A.C. 62-4.160]



The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.

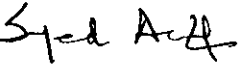
- G.9 In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.73 and 403.111, Florida Statutes. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.
- G.10 The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.
- G.11 This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 62-4.120 and 62-730.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.
- G.12 This permit or a copy thereof shall be kept at the work site of the permitted activity.
- G.13 This permit also constitutes:
- a) Determination of Best Available Control Technology ()
 - b) Determination of Prevention of Significant Deterioration (); and
 - c) Compliance with New Source Performance Standards ().
- G.14 The permittee shall comply with the following:
- a) Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
 - b) The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application or this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.
 - c) Records of monitoring information shall include:
 - 1. The date, exact place, and time of sampling or measurements;
 - 2. The person responsible for performing the sampling or measurements;
 - 3. The dates analyses were performed;
 - 4. The person responsible for performing the analyses;
 - 5. The analytical techniques or methods used; and
 - 6. The results of such analyses.
- G.15 When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

Florida Department of
Environmental Protection

Memorandum

TO: Howard L. Rhodes

THRU: Clair Fancy 
Al Linero 

FROM: Syed Arif  4/18

DATE: April 18, 2000

SUBJECT: JEA Kennedy Plant Fogger Project
DEP File No. 0310047-004-AC

Attached for approval and signature is the air construction permit for the above referenced project. The application was to install inlet foggers ahead of the compressor inlets of three simple cycle combustion turbines. The foggers will operate on hot days and days of relatively low humidity. The evaporative cooling effected by the foggers will allow the units to operate closer to their rated capacity.

Emissions will increase because the heat rate through the units will increase when the foggers are used and effectively cool the inlet air. JEA proposes to limit operation of the coolers to 1000 hours per unit per year to insure PSD is not triggered by their use.

The project modification provides reasonable assurance that all the requirements of the permit will be complied with. I recommend your approval and signature.

SA/a

Attachments

■ Attach this card to the back of the mailpiece, or on the front if space permits.

Article Addressed to:
 Walter Bussells
 J A
 2 W. Church St.
 Jacksonville, FL
 32202

X *Starline Rec.* Agent
 Addressee
 D. Is delivery address different from item 1? Yes
 If YES, enter delivery address below: No

3. Service Type
 Certified Mail Express Mail
 Registered Return Receipt for Merchandise
 Insured Mail C.O.D.

4. Restricted Delivery? (Extra Fee) Yes

2. Article Number (Copy from service label) **Z 031 391 955**

PS Form 3811, July 1999

Domestic Return Receipt

102595-99-M-1789

Z 031 391 955

US Postal Service

Receipt for Certified Mail

No Insurance Coverage Provided.

Do not use for International Mail (See reverse)

Sent to	<i>Walter Bussells</i>
Street & Number	<i>JEA</i>
Post Office, State, & ZIP Code	<i>FL</i>
Postage	\$
Cert. Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	<i>Kennedy</i>
Return Receipt Showing to Whom, Date, & Addressee's Address	<i>Ken.</i>
TOTAL Postage & Fees	\$
Postmark or Date	<i>4-30-00</i>
<i>0310047-007-A</i>	
<i>Ken. Gen.</i>	

PS Form 3800, April 1995